

Title (en)

CONTROL APPARATUS AND METHOD FOR PROGRESSIVE FRACTURE OF WORKPIECES.

Title (de)

REGELUNGSANORDNUNG UND VERFAHREN FÜR DAS PROGRESSIVE BRECHEN VON ZU BEHANDELNDEN STÜCKEN.

Title (fr)

APPARAIL ET PROCEDE DE COMMANDE POUR LA FRACTURE PROGRESSIVE DE PIECES A USINER.

Publication

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Application

EP 90904572 A 19900228

Priority

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Abstract (en)

[origin: WO9009882A1] A control apparatus (10) and method for progressively fracturing a workpiece from a material sheet in a press (12) in which a ram (28) is progressively advanced through the thickness of the material sheet in discrete steps, each of the discrete steps including an advance of the ram (28) into the material sheet a predetermined distance less than the total thickness of the sheet, a stopping of the advance of the ram (28), a relief of the pressure built up in the press (12) due to the pressurized advance of the ram (28) and a subsequent advance of the ram (28) through the material sheet. A distance measuring transducer (48) generates an output indicative of the position of the piston (24) of the cylinder (14) and the ram (28) during movement of the ram. A controller (34), in response to a stored control program and the output of the distance measuring transducer (48), controls the operation of fluid valves (57, 62) to supply pressurized fluid to the cylinder (14) to reciprocate the ram (28). The controller (34) controls pressure regulating valves (114, 116, 118, 120, 122) to supply fluid at a plurality of discrete pressures to the cylinder (14) throughout each cycle of operation of the press (12).

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